

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of

Tukaram K. Hatwar, et al.

A STABILIZED WHITE-LIGHT-  
EMITTING OLED DEVICE

Group Art Unit: 1774

Examiner: Dawn L. Garrett

Serial No. 10/690,940

Filed 22 October 2003

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

**REPLY BRIEF PURSUANT TO 37 C.F.R. 41.41**

Sir:

Appellants hereby reply to points raised in the Examiner's Answer that was mailed on June 20, 2006.

In her Answer, the examiner states that:

The examiner submits that Codama describes the materials such as perylene and rubrene as "**fluorescent substance**" (see col. 12, lines 3-6) and this is how they are commonly described and known in the art. In fact even, applicant describes perylene and perylene derivatives as "**fluorescent dopant**" in their description (see present specification page 14 starting at line 14 through page 18). Appellant's primary argument is that their perylene does not emit light according to their own definition, while the perylene of Codama does emit light. It is the position of the examiner that both appellant and Codama set forth the same fluorescent substance, perylene and perylene derivatives, in a light emitting layer.<sup>1</sup>

The portion of appellant's specification that is cited by the examiner (page 14 starting at line 14 through page 18) relates to the light-emitting substance that is used in the light-emitting layers specified in *element c) of claim 1*, and does include perylene derivatives in an extensive list of "fluorescent dopants." It does not relate to the

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<sup>1</sup> Answer at page 5, emphasis in original.

stabilizing perylene material that is recited in *element d) of claim 1*. The material in element d) is *not* “fluorescent” because element d) of claim 1 specifies that the recited material is only present in “a concentration selected so that it does not emit light.” In order to be a fluorescent dopant, a material must be present in a concentration that results in light emission that can be perceived by the viewer.

The examiner also urges that:

In addition, applicant does not appear to have a conventional definition of “emits no light”. One would think this definition would allow absolutely no light to be emitted by the fluorescent substance; however, appellant’s data in the specification clearly shows a shift in CIE chromaticity coordinates by those alleged non-light emitting perylene derivatives.<sup>2</sup>

While data in appellant’s specification does show variation in chromaticity coordinates as the concentration of the stabilizing perylene is increased, the specification also provides guidance as to the level of variation that is considered acceptable. Thus, in connection with the data in each of Tables 1, 2 and 3, the specification identifies a maximum concentration allowed, and hence the acceptable variation in chromaticity coordinates, in order for the perylene derivative to be considered a “non-luminescent dopant” within appellant’s teaching. This is clearly set forth in appellant’s specification:

the color of the emitted light, as shown by the CIE<sub>x</sub> and CIE<sub>y</sub> values, changes as the concentration of dibenzoperylene increases. This is because dibenzoperylene is known to act as an emitting dopant, and is further known to form aggregates that affect emission properties. Therefore it is necessary that the level of dibenzoperylene concentration be selected so that the dibenzoperylene is *a non-luminescent dopant*. The level at which this occurs will vary depending on the properties of the layer.<sup>3</sup>

Thus, the reader is clearly apprised of what appellant means by a recitation in the claims that the perylene material “does not emit light.”

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<sup>2</sup> Answer at page 6.

<sup>3</sup> Paragraph bridging pages 27 and 28, emphasis added..

For the above reasons and those set forth in appellant's brief on appeal, appellant respectfully requests that the Board of Patent Appeals and Interferences reverse the rejection by the Examiner and mandate the allowance of Claims 1-8, 13 and 17-20.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Raymond L. Owens', is written over a horizontal line.

Attorney for Appellants  
Registration No. 22,363

Raymond L. Owens/djw  
Telephone: 585-477-4653  
Facsimile: 585-477-4646

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.